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EAMON J WALL  
THOMASON MOSER & PATTERSON LLP  
595 SHREWSBURY AVENUE  
SUITE 100  
SHREWSBURY, NJ 07702

EXAMINER

HUYNH, SON P

ART UNIT

PAPER NUMBER

2611

DATE MAILED: 12/19/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/359,559

Applicant(s)

GORDON ET AL.

Examiner

Son P Huynh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 10,14,15,19 and 26-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9,11-13,16-18,20-25 and 29-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 July 1999 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 1-9, 11-13, 16-18, 20-25, 29-31 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 8-9, 11-13, 16-17, 30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 8, line 10, the term "said common video" lacks of antecedent basis.

***Double Patenting***

4. Claims 1, 8, 18 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 15, 7 and 9 of U.S. Patent No. 6,415,437.

Regarding claim 1, claim 15 of patent 6,415,437 (hereinafter referred to as 437) recites an apparatus for distributing digital information comprising:

a service provider equipment;

a subscriber equipment; and a communications network coupling the service provider equipment to the subscriber equipment, where the service provider equipment comprises a program guide generator that produces a digital bitstream containing a program guide graphic and at least one video sequence; the program guide generator also combines program guide graphic, video sequence and background imagery to form a program guide frame sequence; encoders for encoding program guide frame sequences to form a plurality of bitstreams; and a multiplexer for multiplexing the plurality of bitstreams into a transport stream. It is obvious that the subscriber equipment decodes and displays the interactive program guide extracted from the transport stream to viewer in response to a selection from viewer in order to provide a desired interactive program guide to viewer. Thus, the service provider equipment corresponds to the head end being claimed; the interactive program guide corresponds

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to the user interface page being claimed; the video sequence corresponds to the moving image being claimed;

Claim 1 is broader in scope than patent claim 15.

Regarding claim 8, claim 7 of 437 recites a method of generating and presenting an interactive program guide to viewer comprising: combining background imagery, video sequence and program guide graphics to form a plurality of digital bitstreams; multiplexing the digital bitstreams into a transport stream; transmitting the transport stream through a distribution network to a plurality of subscriber equipment; extracting from the transport stream one of the digital bitstreams; decoding the extracted digital bitstream to produce a composite frame sequence; and displaying an interactive program guide containing background imagery, video sequence and program guide graphic from the composite frame sequence. It is obvious that the generating is performed as the head end in order to provide interactive program guide to plurality of users.

Claim 8 is broader in scope than patent claim 7.

Regarding claim 18, claim 9 of 437 recites the method of claim 7 further comprising:

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selecting a different digital bitstream from the transport stream;  
decoding the extracted different digital bitstream to produce a different composite frame sequence; and displaying a different interactive program guide containing background imagery, video sequence, program guide graphic from the composite frame sequence, where the background imagery and video sequence is displayed in an uninterrupted manner while the different digital bitstream is extracted and decode. It is obvious that the second selected bitstream is decoded without resetting a buffer in a decoder in order to prevent interrupting of video sequence and background imagery.

Claim 18 is broader in scope than patent claim 9.

5. Allowance of claims 1, 8, 18 would result in an un-warranted timewise extension of the monopoly granted for the invention as defined in claims 15, 7 and 9 of patent 6,415,437. Therefore, the double patenting rejection is justified.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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7. Claims 1-5, 7-9, 11-13, 16-18, 20-24, 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Terasawa et al. (US 6,147,714) and in view of Alexander et al. (US 6,177,931).

Regarding claim 1, Terasawa et al. teaches a system for generating and using an interactive user interface comprising:

a head end for generating a bitstream representing an encoded user interface, each of the bitstreams including a respective user interface page;

a distribution network coupled to the head end; and subscriber equipment, coupled to the distribution network, for decoding and displaying the user interface extracted from a selected bitstream (see figure 1, figure 23). Terasawa further discloses each user interface page comprising an image region and a respective graphical region (see figure 8). However, Terasawa et al does not specifically disclose the user interface page comprising a common moving image video region.

Alexander et al. discloses a user interface page comprising a common moving image video region (see figure 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Terasawa to incorporate the feature as taught by Alexander et al. in order to provide more information about a video program to viewer.

Regarding claim 2, Terasawa et al. teaches the head end comprises:

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a user interface generator for producing the plurality of bitstreams; and a modulator (see figure 1).

Regarding claim 3, Terasawa et al. teaches the user interface generator comprises a user interface source and an encoder (see figure 1).

Regarding claim 4, Terasawa et al. teaches the user interface source comprises: a video source, a graphic source (see figure 1). Inherently, the interface source also comprises an overlay source for graphic formatting.

Regarding claim 5, Terasawa et al. teaches the user interface generator comprises a multiplexer for assigning bitstream identifiers to each of the bitstreams in the plurality of bitstreams (see figure 1, figures 15-18).

Regarding claim 7, Terasawa et al. teaches the subscriber equipment comprises: a demodulator 22; a demultiplexer 24; and a decoders 25 and 26 (see figure 23).

Regarding claim 8, Terasawa et al. teaches a method of generating and using an interactive user interface comprising the steps of:  
generating, within a head end of an information distribution system, a plurality of bitstreams representing an encoded user interface, each of the bitstreams including a respective user interface page



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broadcasting the encoded user interface;

receiving the encoded user interface at the receiving station and selectively decoding and displaying the user interface in response to subscriber's input (see figure 1 and figure 23). Terasawa further discloses each user interface page comprising an image region and a respective graphical region (see figure 8). However, Terasawa et al does not specifically disclose the user interface page comprising a common moving image video region.

Alexander et al. discloses a user interface page comprising a common moving image video region (see figure 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Terasawa to incorporate the feature as taught by Alexander et al. in order to provide more information about a video program to viewer.

Regarding claim 9, Terasawa et al. teaches the generating step further comprises the steps of:

producing a plurality of video signals representing the user interface pages;

encoding the plurality of video signals to produce the bitstreams; and

modulating the bitstreams into a format for transmission (see figure 1).

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Regarding claim 11, Terasawa et al. teaches the step of assigning a respective bitstream identifier value to each of the plurality of bitstreams (see figure 15).

Regarding claim 12, Terasawa et al. teaches the steps of:  
arranging the bitstreams into at least one transport stream; and  
modulating the at least one transport stream into a format for transmission (see figure 1).

Regarding claim 13, Terasawa et al. teaches at least one transport stream comprises a system stream that contains a plurality of transport stream (see figures 1, 14-16).

Regarding claim 16, Terasawa et al. teaches the steps of:  
receiving an indication of the selection of an object within a presented user interface;  
(see figures 34 and 39). It is obvious that the event occurs within the head end in response to the signal inputted from user in order to control program broadcasting from head end.

Regarding claim 17, Terasawa et al. teaches the event is causing the tuning of subscriber equipment to a digital channel (see col. 17, lines 12-30).

Regarding claim 18, Terasawa teaches a method comprising the steps of:

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receiving a transport stream that contains a plurality of bitstreams representing a respective plurality of encoded user interface pages  
extracting from the transport stream a select bitstream; and  
decoding and displaying the select bitstream to produce the user interface;  
selecting from user interface page, an object that identifies another bitstream and  
decoding the selected bitstream (see fig. 1, fig. 15, fig. 27, fig. 30, fig. 31). However, Terasawa does not specifically disclose the each page comprising a moving image video region.

Alexander et al. teaches user interface page comprising a moving image video region and program graphic region, when user select an icon from user interface page, the program correspond to the selected icon is displayed on the screen (see figure 1). Inherently, the selected bitstream is decoded without resetting a buffer in a decoder. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Terasawa to incorporate the feature as taught by Alexander et al. in order to provide more information to user.

Regarding claim 20, Terasawa et al. teaches producing an overlay graphic for selectively emphasizing objects within the user interface (see figure 36).

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Regarding claim 21, Terasawa et al. teaches selecting the emphasized object to change the context of the system from a user interface context to an alternate context (see figures 35-37).

Regarding claim 22, Terasawa et al. teaches the alternate context comprises a broadcast television context (see col. 16, lines 32-45).

Regarding claim 23, Terasawa et al. discloses changing the context cause the decoder to extract a different bitstream for decoding (see figure 30).

Regarding claim 24, Terasawa et al. discloses decoding and presenting an audio bitstream associated with a video region of the user interface page (see figure 23).

Regarding claim 29, Terasawa in view of Alexander teaches a system as discussed in the rejection of claim 1. Alexander further teaches a moving window such as windows 12, 14, 16 and program guide 52. Inherently, Terasawa in view of Alexander teaches each user interface page is encoded using sliced based encoding wherein each of the common moving image video and respective graphical regions are represented by respective plurality of encoded slices.

Regarding claim 30, Terasawa in view of Alexander teaches a method as discussed in the rejection of claim 8. Alexander further teaches a moving window such

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as windows 12, 14, 16 and program guide 52. Inherently, Terasawa in view of Alexander teaches each user interface page is encoded using sliced based encoding wherein each of the common moving image video and respective graphical regions are represented by respective plurality of encoded slices.

Regarding claim 31, Terasawa in view of Alexander teaches a method as discussed in the rejection of claim 18. Alexander further teaches a moving window such as windows 12, 14, 16 and program guide 52. Inherently, Terasawa in view of Alexander teaches each user interface page is encoded using sliced based encoding wherein each of the common moving image video and respective graphical regions are represented by respective plurality of encoded slices.

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Terasawa et al. (US 6,147,714) in view of Alexander et al. (US 6,177,931) as applied to claim 1 above, and further in view of Sposato (US 5,781,228)

Regarding claim 6, Terasawa et al. in view of Alexander teaches a system as discussed in the rejection of claim 1. However, neither Terasawa nor Alexander specifically discloses the distribution network is a hybrid fiber-coax network.

Sposato discloses the distribution network 16 is a hybrid fiber-coax network (see col. 8, lines 11-13). Therefore, it would have been obvious to one of ordinary skill in the

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art at the time the invention was made to modify Terasawa et al. and Alexander to incorporate the feature as taught by Sposato in order to expand capabilities of distribution network.

Sposato discloses the distribution network 16 is a hybrid fiber-coax network (see col. 8, lines 11-13). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Terasawa et al. and Alexander to incorporate the feature as taught by Sposato in order to expand capabilities of distribution network.

9. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Terasawa et al. (US 6,147,714) in view of Alexander et al. (US 6,177,931) as applied to claim 24 above, and further in view of Klosterman et al. (US 5,940,073).

Regarding claim 25, Terasawa et al. in view of Alexander et al. teaches a method as discussed in the rejection of claim 24. However, neither Terasawa et al. nor Alexander et al. specifically discloses the audio is continuous through transitions to other user interface.

Klosterman et al. teaches audio is presented continuously during transitions between user interface pages (see col. 7, lines 45-53). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify

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Terasawa and Alexander to incorporate the feature as taught by Klosterman in order to prevent audio interrupting when changing to other interface thereby increase quality of program services.

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Noguchi et al.** (US 6,034,677) discloses method and apparatus for displaying an electronic program guide.

**Yuen et al.** (US 6,239,794) discloses method and apparatus for simultaneously displaying a television program and information about the program.

**Schein et al.** (US 6,075,575) discloses remote control device and method for using television schedule information.

**Lawler et al.** (US 5,907,323) discloses interactive program summary panel.

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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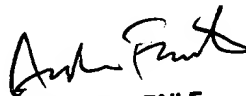
mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Son P Huynh whose telephone number is 703-305-1889. The examiner can normally be reached on 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on 703-305-4380. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the customer service office whose telephone number is 703-306-0377.

Son P. Huynh  
December 4, 2002

  
ANDREW FAILE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600